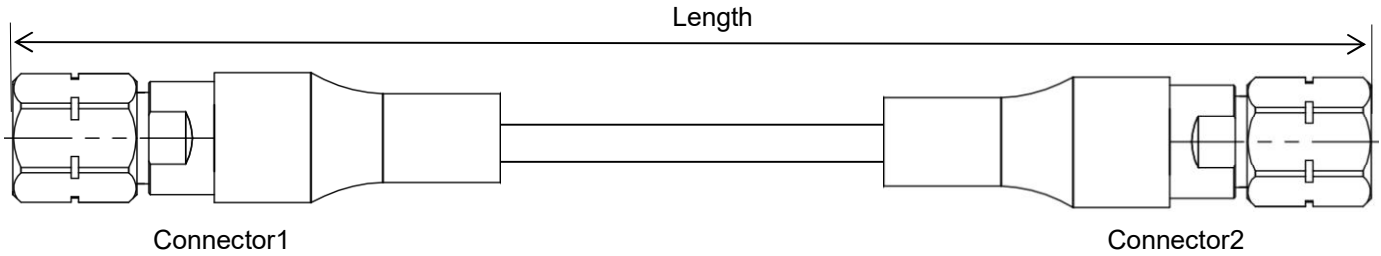


Precision Phase Stable Test Cable Assembly, Using PL360P

DC-50 GHz, 2.4mm Male to 2.4mm Male

PL360P-24M24M-L(L:Length)

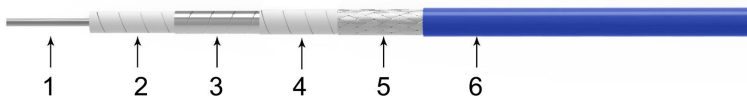


- Length can be in meter or in inch etc, e.g, PL360P-24M24M-1M. Standard length tolerance: $\pm 1.5\%$. Custom lengths and other connector types available.
- Length is measured from one connector end to the other connector end as shown above. For RA connectors, use the pin center-line.

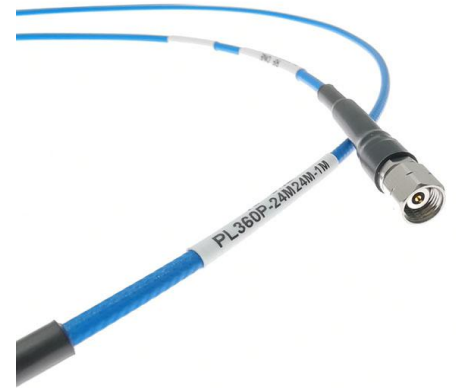
Configuration

Connector 1	2.4mm male	Connector 2	2.4mm male
Body	Passivated stainless steel	Body	Passivated stainless steel
Center Contact	Gold plated BeCu	Center Contact	Gold plated BeCu
Cable Type	PL360P		

Cable Construction



No.	Construction	Size (mm)	Materials
1	Center Conductor	0.72	Solid silver-plated copper
2	Dielectric	2.15	Low density PTFE
3	Outer Conductor	2.30	Silver-plated copper tape wrap
4	Interlayer	2.60	Low density PTFE
5	Outer Shield	3.05	Silver-plated copper wire braid
6	Inner Jacket	3.60	FEP



Electrical

Frequency	DC-50 GHz
Impedance	50 Ω
VSWR Max	1.35
IL Max(1 meter assembly)	4dB
*Mechanical Phase Stability	$<\pm 5^\circ$
Amplitude Stability vs Shaking	$<\pm 0.1\text{dB}$

Mechanical & Environmental

Min.Bending Radius Static	18mm
Min. Bending Radius Repeated	36mm
Velocity of Propagation	76%
Temperature(Operation)	-50~85 $^\circ\text{C}$
Temperature(Storage)	-60~85 $^\circ\text{C}$

* Wrap the cable 360 degree around a mandrel whose diameter is ten times of the cable jacket size.

Bulk Cable Attenuation(Typical@25°C) & Power(VSWR=1.0; 40°C; Sea level)

Frequency MHz	300	1000	2000	4000	6000	8000	10000	12000	18000	26500	40000	50000
dB/100 Meter	23.9	43.8	62.2	88.5	108.8	126.1	141.5	155.4	191.8	234.8	291.7	328.5
Avg.Power kW	0.750	0.409	0.288	0.202	0.165	0.142	0.127	0.115	0.093	0.076	0.061	0.055

$$\text{Attenuation at any frequency} = [1.370735 \times \text{SQRT}(\text{FMHz})] + [0.000440 \times \text{FMHz}]$$

- Notes:**
- 1) The above attenuation refers to typical loss of cable only, max loss is 1.1 times of typical loss. Insertion loss per connector is estimated as 0.03dB x SQRT Freq(GHz).
 - 2) Power handling values are calculated based on cable properties. Power handling will vary based on connector type and actual VSWR of the cable assembly.

Typical Test Data (PL360P-24M24M-1M)

